

REMARKS

Reconsideration of the rejection of the subject matter of this application is requested.

Status of Claims

Claims 1-15, and 17-32 remain for consideration. Claims 16 and 33 have been canceled. All claims pending now specify that the method is performed using a cable network. Claim 1, and claims 2-15, and 16-30, that depend on claim 1, now specify a more specific recitation of the service arrangement whereby standard cable network subscribers are served simultaneously in the same system that implements the new channel splitting technique for data rate enhancement.

The Drawing

The drawing appears to be acceptable as filed.

Background

Before addressing the substantive rejections it may be helpful to review some of the main features of the invention. This may aid in responding to the questions raised in the rejections below.

The invention is a method for transmitting high bit rate data streams. The high bit rate data stream is divided into two bit streams each having a lower bit rate. The method is practiced in a context of a cable network that has one or more

limitations, typically noise or QoS limitations, on data transmitted at the high bit rate. By reducing the bit rate for the transmission, the quality of transmission for the lower bit rate streams is inherently improved. An important feature of the invention is to implement this new cable transmission mode while continuing to provide service to conventional system users. Thus claim 1 requires, now with more specificity, connections to those users on at least one of the RF channels that are simultaneously being used to implement the high bit rate data service.

Rejections

The rejections on prior art that are of record and are intended subjects of this paper are:

Claims 1-3, 11, 25, 31 and 32 stand rejected under 35 U.S.C. 103(a) as unpatentable over Rasanen et al. in view of Robinett et al.

Claims 4-10, 12-19, 20-24, and 26-30 stand rejected under 35 U.S.C. 103(a) as unpatentable over Rasanen et al. in view of Robinett et al., and further in view of Oz et al.

Argument

Rasanen et al. patent (Rasanen)

The system described by Rasanen is a wireless system wherein the transmission medium is space. It is known that the characteristics, and especially limitations, of free space transmission are very different from those of cable transmission. They use different technologies and are controlled by different

standards. So the starting point, technology, and technology constraints of Rasanen are quite different from those that confront a cable network designer. So much so that a persuasive case can be made on technical grounds, that one skilled in the art with a goal of improving cable network site to site transmission would not expect to find help from a wireless technology. The emphasis here is on the site-to-site portion, or transmission portion, of the system, where the major differences lie. The same arguments may be less effective in relating to other parts of the system.

Moreover, a successful modification to an existing cable network, one that is not only attractive from a business standpoint, and effective from a technology standpoint, must also be a modification that is allowed by the standards bodies. The system of claim 1 is specifically designed to be overlayed over an existing cable network, with accommodation for existing customers that use the conventional bit rate. No such problem or solution is addressed in the Rasanen patent. The passages cited in the Office action from the Rasanen patent to show serving multiple users refer to processing the signal after it is received at the receiving station. Therefore the transmission portion of the system of Rasanen does not require any accommodation for existing system needs. Thus the transmission portion can be designed, and is designed in the Rasanen case, wholly independent of an existing system, existing technology, and existing standards. In applicants' system as claimed, the transmission portion of the system is designed with an accommodation for existing needs. This has been clarified by the amendment above, wherein the existing users are accommodated

BETWEEN the transmitter and receiver, i.e. in the transmission portion.

Robinett et al. patent (Robinett)

Robinett is cited to show multiple data streams with different bit rates, and is cited in combination with the Rasanen patent. It is submitted that a primary weakness in this rejection is the lack of a convincing basis for combining the Rasanen and Robinett patents. Other than the bare statement that it would have been obvious to one of ordinary skill in the art to combine these references the Office action gives no technical rationale. As the Examiner undoubtedly knows,

“...rejections based on 35 U.S.C. § 103 must rest on a factual basis.

In making such a rejection, the examiner has the initial duty of supplying the requisite factual basis and may not, because of doubts that the invention is patentable, resort to speculation, unfounded assumptions or hindsight reconstruction to supply deficiencies in the factual basis. In re Warner, 379 F.2d 1011, 1017, 154 USPQ 173, 178 (CCPA 1967), cert. denied, 389 U.S. 1057 (1968). The mere fact that the prior art could be so modified would not have made the modification obvious unless the prior art suggested the desirability of the modification. See In re Mills, 916 F.2d 680, 682, 16 USPQ2d 1430, 1432 (Fed. Cir. 1990); In re Gordon, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984).

Applicants submit that in the case of a combination rejection the factual basis should include a rationale for the combination. In the present situation,

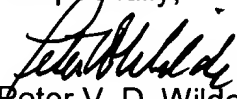
Robinett et al. are concerned with a distributed re-multiplexer for video systems. Neither Rasanen nor applicants are concerned with problems involving video transmission. Nor is there a distributed multiplexer evident in either of their systems. Thus the core of the Robinett teachings has no apparent relevance to anything in the Rasanen patent.

Moreover, it is not clear that the passage cited in the Office action as showing multiple bit rates relates to multiple channels. It appears to describe multiple bit rates on different portions of one channel. It does not appear to describe the essence of applicants' claim, where a first channel is divided into multiple data streams and the bit rate of the first channel and the bit rates of the multiple channels are different. That is not at all evident from the passage cited from Robinett. So the combination of references does not teach the claimed subject matter.

The Oz reference is added to anticipate claims prescribing packetized data, and processing of packetized data. At this stage in the proceedings applicants choose to rely on the combination of the features in claim 1, which, it is alleged, have not been met, with the packet data transmission aspects. Thus until a sustainable case is made against the patentability of the main claims, these claims may be considered, in this context, as bundled.

In view of the amendments and these remarks, reconsideration and allowance of claims 1-15, and 17-32 is requested.

Respectfully,


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